

Steele County

Ag Alert



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Scout for Cereal Aphids and Grasshoppers

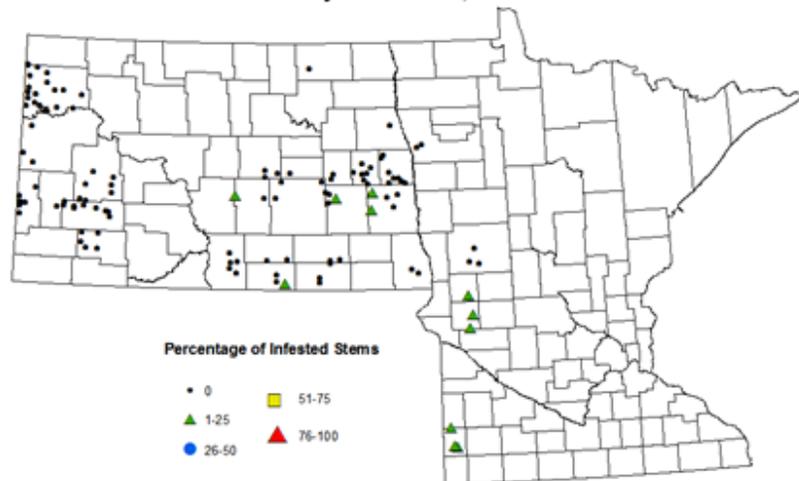
By: Janet Knodel, NDSU Extension Entomologist

The IPM Scouts have detected cereal aphids and grasshopper nymphs in southern North Dakota. This is a good time to intensify your scouting efforts for cereal aphids in wheat, durum and barley, and for grasshoppers in any crop.

Cereal Aphids: Look for aphids on the undersides of leaves. Aphids are soft-bodied and pear-shaped insects that are often clustered together. Cereal aphids have been reported in North Dakota at low densities of <10 aphids per plant and <5% incidence. Southwestern Minnesota is seeing higher incidence of aphids at 16-24% (Source: UMN IPM Scouts). To protect small grains from yield loss due to aphid feeding, the **treatment threshold is 85% stems with more than one aphid present or 12-15 aphids per stem, prior to complete heading.** Field scouting should continue up to the heading stage of wheat.

Aphids in Wheat

May 27 - June 7, 2013



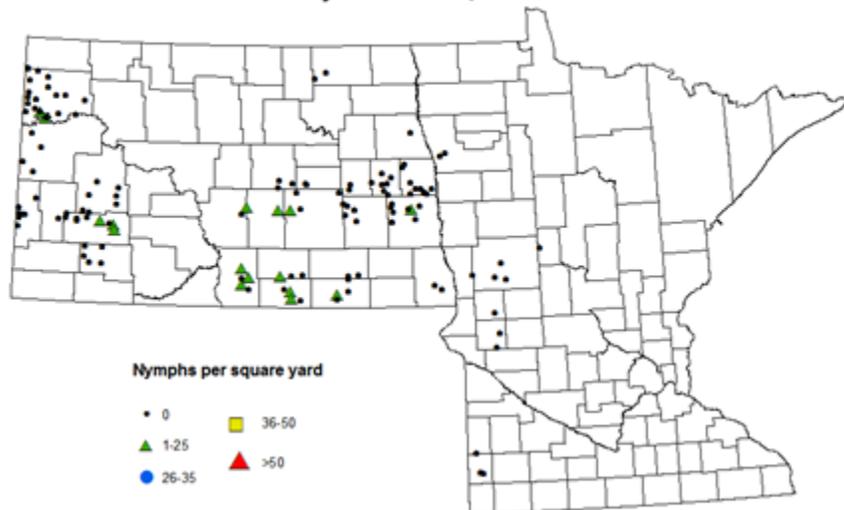
Grasshoppers: Grasshopper hatch has just started and population densities are low. In about two weeks, populations will increase and peak (late June or early July). Scout for grasshoppers in grassy field ditches, field margins and roadsides. Newly hatched grasshoppers do not move far from their hatching sites. These grasshoppers are small, only about the size of a wheat kernel. Temperature and rainfall are important in determining the severity of grasshopper infestations. In general, hot and dry conditions favor grasshopper outbreaks. Cool, wet spring weather will increase the mortality of grasshopper nymphs. Since it is difficult to estimate the number of grasshoppers per square yard when population densities are high, pest managers can

use four 180-degree sweeps with a 15-inch sweep net, which is equivalent to the number of adult (or nymph) grasshoppers per square yard. Threatening is considered the action threshold for grasshoppers.

Rating	Nymphs		Adults	
	<u>per square yard</u>	<u>per square yard</u>	<u>per square yard</u>	<u>per square yard</u>
	<u>Margin</u>	<u>Field</u>	<u>Margin</u>	<u>Field</u>
Light	25-35	15-25	10-20	3-7
Threatening	50-75	30-45	21-40	8-14
Severe	100-150	60-90	41-80	15-28
Very Severe	200+	120+	80+	28+

Grasshoppers

May 27 - June 7, 2013



Low Herbicide Supply

By: Rich Zollinger, NDSU Extension Weed Specialist

Certain popular PRE and POST herbicides may be in short supply this year. The newly registered Zidua (pyroxasulfon) is one of them. Zidua is currently registered for use in corn and soybean. Zidua registration on wheat may occur in the future. Zidua is a residual, preemergence herbicide that controls several grass and broadleaf weeds. The active ingredient is also included in Anthem from FMC and Fierce from Valent. Zidua can be included in the EPOST application of glyphosate on soybean. The majority of the Zidua supply for 2013 will be focused on the Delta area of the US to control gly-resistant Palmer amaranth which will decrease the supply in ND. BASF intends to have full product availability in 2014.

North Dakota SLN Label Issued for BroadAxe

The ND DOA has issued a special local needs (SLN) registration to FMC Corporation enabling North Dakota dry bean producers to manage kochia and ALS-resistant kochia with BroadAxe Herbicide in dry beans. The SLN labeling allows a pre-plant or preemergence application of Broadaxe to dry bean fields by ground or air. Application may be made up to 3 days after planting if seedlings have not broken the soil surface and if the seed furrow is completely closed or covered by soil. The product may be applied at a rate of 19 to 26 fluid ounces per acre depending on soil texture, pH, and organic matter. Users must comply with all restrictions, precautions and the directions found in the SLN labeling, and a copy of the labeling must be in the user's possession at the time of application. This SLN registration is effective immediately and expires Dec. 31, 2018. Section 24(c) of the Federal Insecticide, Fungicide and Rodenticide Act gives states the authority to register additional uses for federally registered pesticide products, or new products to meet special local needs. Minnesota issued a similar SLN registration for use in dry beans.

Do not use BroadAxe on sandy soil. Read entire label and follow the rate chart on the label for rates for each field - one rate does not fit all fields. If a grower is concerned about injury, do not use, or use a low rate until they become familiar with tolerance of the bean type grown. A grower indemnification is required and growers will use Broadaxe at their own risk. This is similar to the way FMC labeled labeled Spartan Charge on dry beans. BroadAxe has a 24 month plant back rotation restriction to sugarbeet with a successful bioassay. Develop a rate structure on a field by field basis based on soil pH, soil OM and soil type. The rate chart on the label is essential to help growers find the appropriate rate.

Small Grain Disease Forecasting Site

By: Marcia McMullen, NDSU Professor Emeritus & Sam Markell, NDSU Extension Pathologist, Broadleaf Crops

Almost all NDAWN locations have had continuous days of weather favorable for tan spot infection in the past week (www.ag.ndsu.edu/cropdisease/). Similarly, IPM scouts have reported relatively high incidence but low severity of the disease. Reports from Extension specialists across the state indicate that most spring wheat fields are in the 3 to 5 leaf stage, or early tillering - perfect growth stages for early season application of fungicide if needed, based on presence of tan spot symptoms and crop rotation history.

Winter wheat fields are generally in the jointing to seven-leaf stage of development. Disease pressure, other than for tan spot, has been low in winter wheat, with no reports of stripe rust yet. Winter wheat is at least several weeks away from concern about possible Fusarium head blight development. The disease forecasting site currently indicates a high risk of Fusarium head blight in parts of the state, but these risk maps are based only on weather conditions. We don't have any crop yet in the flowering stage, the time of infection in wheat.

More information and photos about tan spot can be found at:

<http://www.ag.ndsu.edu/pubs/plantsci/pests/pp1249.pdf>

An electronic version of the 2013 Field Crop Fungicide Guide is available at:

<http://www.ag.ndsu.edu/extplantpath/publications-newsletters/fungicides>

Corn Yield Potential Development during Early Growth Stages

By: Joel Ransom, NDSU Extension Agronomist

Corn growth and development is proceeding at an agonizingly slow pace. In most fields, plants appear yellow, purple, and/or have bleached areas on the leaf. There is little that can be done at this stage to improve the appearance of the corn plant. The main reason that they appear yellow and sickly is not so much the lack of nutrients in the soil, but the plant's inability to access them because of limited root development (associated with cool soils), and the lack of sufficient sunlight to enable optimum photosynthesis. Photosynthesis produces the energy and building blocks for chlorophyll development which give the corn plant its green color. Corn has a much longer growth cycle than small grains. Therefore, stress during a short period of the growing cycle (in this case temperature stress), is less likely to have a negative impact on yield development than for small grains. That being said, corn can be sensitive to competition from weeds during early growth stages, so early weed control can be more critical to corn yield development than early side dressing N. Currently, corn growth stages vary considerably in the state depending on the planting date. The mid-May planted fields are probably approaching the three leaf stage. During this stage, root and ear shoots develop. By the 5 leaf stage the number of rows of kernels is fixed. Row numbers, however, are usually determined by the genetics of the plant, rather than by the growing environment. It is not until the 12 to 14 leaf stage that the number of kernels per row are fixed. Therefore, the window for obtaining a yield response from side dressing if N is limiting is fairly large, particularly if some N was applied at or before planting. For practical reasons, however, side dressing is best done before the plant gets too tall (6 to 9 leaf stages). The corn plant has its greatest demand for N from the 9 leaf stage to early grain filling, so having the additional N in place by that period will ensure a high potential for its utilization. The risk of N loss is low during periods of high use, as well, so delaying splits until this period helps improve N fertilizer use efficiency.

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STEELE COUNTY

AG ALERT

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